

CLAIMS

1. A wound care device comprising chitosan, said chitosan being capable of absorbing liquid to form a swollen, coherent gel, characterised in that said chitosan, being in the form of fibres, having been modified by treatment with acid in a solvent which is not able to dissolve the chitosan fibres and by treatment with heat.
2. A wound care device according to claim 1, characterised in that the chitosan has a viscosity of less than 1000 cP, more preferred less than 500 cP, even more preferred less than 300 cP and most preferred from 40 to 200 cP,
- 10 measured on a 1% w/w chitosan solution in 1% aqueous solution of acetic acid.
3. A wound care device according to claim 1 or 2, characterised in that the proportion between length and diameter of the fibres is at least 25, more preferred more than 80 and most preferred more than 200.
4. A wound care device according to any of claims 1 - 3, characterised in that the
- 15 chitosan fibres have an absorption higher than 20 g/g, more preferred higher than 25 g/g and most preferred higher than 30 g/g.
5. A wound care device according to any of claims 1 - 4, characterised in that the acid is an hydroxy or acyl organic acid, which is soluble in the solvent used, preferably glycolic, glyoxylic, pyruvic, lactic or a hydroxy propionic/butanic acid.
- 20 6. A wound care device according to any of claims 1 - 5, characterised in that the heat treatment of the chitosan is carried out at a temperature of 50 - 250°C.
7. A wound care device according to any of claims 1-6, characterised in that the fibres are manufactured into a fibre rope, knitted, woven or non-woven sheet or pouch or in the form of an island dressing.
- 25 8. A wound care device according to any of claims 1 - 7, characterised in that the device comprises from 0 - 60 % of fibres other than chitosan.

9. A wound care device according to any of claims 1- 8, characterised in that the acid is a mixture of at least two acids.

10. A wound care device according to any of claims 1-9, characterised in that the ratio of acid to chitosan is from 2 mmol to 20 mmol acid per gram chitosan, more preferred from 3 to 15 mmol acid per gram chitosan and most preferred from 4 to 10 mmol acid per gram chitosan.

11. A wound care device according to any of claims 1-9, characterised in that the ratio of acid to chitosan is from 2 to 7.5 mmole acid per gram chitosan, more preferred 3 - 7.5 mmole acid per gram chitosan and most preferred from 5 to 7 mmole acid per gram chitosan.

12. A method of preparation of a wound care device comprising chitosan (being capable of absorbing liquid to form a swollen, coherent gel, said method comprises the steps of

- a) suspending the chitosan in the form of fibres in a solvent, which is not able to dissolve the chitosan fibres, comprising acid
- b) isolating the resulting modified chitosan fibres from the solvent
- c) treating the chitosan fibres with heat during step a) or/and b).

13. A method of preparation of a wound care device according to claim 12, characterised in that the fibres are manufactured into a fibre rope, knitted, woven or non-woven sheet or fabric.